Claims

1. Apparatus for measuring absorbance comprising a light source (1) emitting a sample beam (102) which is incident upon a cell (14) having a sample area (15), the cell being arranged to reflect the sample beam to a detector (8), characterised in that the apparatus further comprises a modulation means arranged to modulate the sample beam so as to improve the sensitivity of absorbance measurement.

2. Apparatus as claimed in claim 1, wherein said modulation means includes a scanning device (13, 115, 130) arranged to move the sample beam from a first position in which the sample beam is incident upon said sample area to a second position in which the sample beam is incident upon the cell.

3. Apparatus as claimed in claim 2, wherein said scanning device is a linear scanning device (13, 130).

4. Apparatus as claimed in claim 3 wherein said linear scanning device (130) is arranged to move the cell.

5. Apparatus as claimed in claim 3, wherein said apparatus further comprises an optical element (11) upon which said sample beam is incident and said linear scanning device (13) is arranged to move the optical element.

6. Apparatus as claimed in claims 4 or 5, wherein said linear scanning device is a motor

7. Apparatus as claimed in claims 4 or 5, wherein said linear scanning device is a piezo-electric device.

8. Apparatus as claimed in claim 2, wherein said apparatus further comprises an optical element (116) upon which said sample beam is incident and said scanning device (115) is an angular scanning device arranged to move the optical element.

9. Apparatus as claimed in claim 8 wherein said angular scanning device is a galvanometer.

10. Apparatus as claimed in any preceding claim, wherein said apparatus includes a dual beam to co-configuration (104).

11. Apparatus as claimed in any preceding claim, wherein said cell (14) having a sample area (15) comprises a first glass plate (601) bonded to a second glass plate (602), said first plate having a flow channel (603) formed therein and said second plate having reflection means (604) deposited thereon.

12. Method for measuring absorbance comprising the steps of transmitting a light beam (102) through a cell (14) having a sample area (15), reflecting said light beam to a detector (8), characterised by the further steps of modulating the sample beam such that said sample beam is moved from a first position in which the sample beam is incident upon the sample area to a second position in which the sample beam is incident upon the cell, thereby improving the sensitivity of the absorbance measurement.